REMARKS/ARGUMENTS

Statement of the Substance of the Interview

The undersigned attorney thanks the examiner for extending the courtesy of conducting a telephonic interview on 18 May 2009. In addition to the undersigned and the examiner, inventor Brad Myers was present on the call.

An argument was presented that amended claim 1 defines over the prior art reference to Wu et al. (WO 00/72300 or US 2003/0006956) (hereinafter "Wu"). That argument is reproduced below. An argument was also presented that Wu merely discloses a "shift key," not a method in which part of the stroke creating the character is used to determine the case of the character as is the case in claim 17. That argument is also reproduced below. Finally, the examiner suggested certain language to address the § 101 issues. The suggested language is incorporated into the claims in this amendment.

Rejection Under § 101

In paragraph 3 of the Office action, claims 1-17, 20-36, 54, and 55 stand rejected under 35 U.S.C. § 101. In response, independent claims 1, 17, and 33 have been amended to add the step of "using a processor to perform the following method." It is respectfully submitted that with that amendment, the claims are tied to another statutory category. Reconsideration and withdrawal of the rejection of claims 1-17, 20-36, 54, and 55 under 35 U.S.C. § 101 is respectfully requested.

Rejections Under § 102

In paragraph 4 of the Office action, independent claims 1 and 38 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Wu. It is submitted that the present invention as set forth in independent claims 1 and 38 is directed to a gestural system which receives data representing a continuous path made by traversing edges and diagonals within a physical template constraining an input device. This gestural system allows users to generate characters by traversing a continuous path often times resembling the character to be generated. The data representative of the continuous path is used to determine a sequence of corner hits where the corner hits correspond to a

corner defined by the template constraining the input device. It is this sequence of corner hits from which the character is identified, independently of the path input by the user. Thus, users who input wobbly lines, arcs, or other types of strokes which would be difficult if not impossible for a pattern recognizer to recognize, are not a problem for the present invention. Furthermore, use of the template helps to constrain the input provided by the user. In that manner, a benefit of the gestural system (easily remembered paths) is maintained while discarding that data (the path between corner hits) which is often problematic.

Support for the amendment is found, for example, in paragraph [0014] of the application as filed which recites that "the user makes characters by traversing the edges and diagonals of a shape (e.g., a square) imposed over the usual text input area." See also paragraph [0029] of the application as filed which states "to make a character, the user places the stylus 105 down inside the square hole 104 (Fig. 1), moves the stylus in a specific pattern along edges and diagonals into corners of the square . . ."

Wu does not have a "receiving a path" step in his preferred embodiments and does not need to "determine a sequence of corner hits within said received path" because in Wu, only the corners are input by pushing or touching the keys 20 on input device 12. For example, Figs. 2a-2f represent the strokes interpreted by the computer based on a path a person's finger or thumb travels between the discrete input keys 20. This is clearly disclosed in Wu, paragraphs [0027] and [0028] of the published U.S. application as follows:

> [0027] In operation, if a user wishes to input a left-right horizontal stroke, the user moves his or her thumb horizontally across key1 and key2. The signal that key1 and key2 have been consecutively visited in a particular sequence is sent to the microprocessor 11 for interpretation as horizontal stroke. In the same manner, for a top-down vertical stroke, the user moves his or her thumb across key1 and key2.
>
> [0028] The method presented here defines 6 fundamental strokes, namely "horizontal", "vertical", "slash", "back slash", "clockwise" and "counter-clockwise". There now follows, with reference to FIGS. 2a-2f, a brief description of the six fundamental strokes and how they can be entered via sequence of keys. In the following

> table (Table 1), "No." is a serial number for the fundamental strokes; "Type" is the name of the fundamental strokes; "Var" is the number of variations of thumb move paths; and "Path" is the thumb move paths defined by the sequence of keys being visited. (Emphases added).

As seen from the foregoing block quote, Wu does not have a step of receiving data representing a continuous path made by traversing edges and diagonals within a physical template constraining an input device nor does it have a step of determining a sequence of corner hits within the path.

Wu discloses in Fig. 6 an embodiment using a joystick. This joystick embodiment of Wu, however, works in a manner similar to the previously described embodiment.

> [0049] In operation, a user moves the joystick element 100 with his or her thumb or finger and the ball rotates such that the silvered circle 120 makes contact between the ground contact 121 and one of the discrete compass-point contacts 110-113. In this way, the input device of FIG. 5 can generate a series of discrete inputs just like the four-key input device 12 of FIG. 1. A north-west movement of the joystick generates the same input as key 1 of input device 12, and so on.

One final embodiment in Wu shown in Figs. 5 and 8, illustrates a joystick producing an analog output. That analog output is digitized as shown in Fig. 8, scaled, smoothed, segmented, and matched with existing templates. This embodiment of Wu is nothing more than the prior art in which the entire path is digitized and used for pattern matching. In the present invention, in contrast, as discussed in conjunction with claims 1 and 38, the corner hits are used to identify the character independently of the path. Clearly, in the embodiment of Fig. 8 of Wu, character recognition relies upon matching of segments to templates. For the foregoing reasons, it is respectfully submitted that the rejection of independent claims 1 and 38, as well as their dependent claims, as being anticipated by Wu be withdrawn.

In paragraph 4 of the Office action, independent claims 17 and 56 stand rejected as being anticipated by Wu. Claims 17 and 56 require that the indication of upper or lower case be part of the unistroke that creates the character. In contrast, the portion of Wu cited by the examiner

works like the shift key on a keyboard and is not part of the creation of the character. Inputting the 4, 1 corner sequence causes the case to toggle between upper and lower. If the case of the previously formed letter was lower, and corners 4, 1 are selected, the next letter formed will be upper case. All subsequent letters formed will also be upper case, until the 4, 1 corner sequence is input which will cause the case to toggle back to lower case. In the invention of claims 17 and 56, all letter characters are lower case unless the unistroke creating the letter character ends in the common predetermined corner. No such result is possible in Wu. Wu cannot anticipate claims 17 and 56.

During the interview, the examiner noted the relevance of U.S. Patent No. 5,832,113 to Sano ("Sano"). Sano neither anticipates nor renders obvious the subject matter of claims 17 and 56. Sano teaches tapping an on-screen keyboard key for lower case (column 3, lines 42-58), and making a circle on top of an on-screen keyboard key for upper case (column 3, line 59-column 4, line 3 and Fig. 4). The taps (dots) and circles of Sano can be made anywhere over the key. The examiner will appreciate that in the invention set forth in claims 17 and 56, there is no keyboard. Furthermore, the dot and the circle of Sano are additional inputs added after the character is identified and are not part of the unistroke which creates or identifies the character. It is respectfully submitted that Sano does not present a bar to the patentability of claims 17 and 56.

Claim 33, the only other independent claim in the application, has been amended in a manner similar to the amendments made to claim 1. It is respectfully submitted that amended claim 33 is in condition for allowance for the same reasons that claim 1 is in condition for allowance.

Applicants at this time choose not to present arguments in favor of the patentability of the dependent claims. Applicants' silence with respect to those claims should not be viewed as acquiescence in the Office's position. Applicants reserve the right to present arguments in favor of the patentability of any of the dependent claims at a later date should that become necessary.

Applicants have made a diligent effort to place the instant application in condition for allowance. Accordingly, a Notice of Allowance for pending claims 1-17, 20-36, and 38-71 is respectfully requested.

Respectfully submitted,

Edward L. Pencoske
Reg. No. 29,688
Jones Day
500 Grant Street, 45th Floor
Pittsburgh, PA 15219-2514
Telephone: (412) 394-9531
Fax: (412) 394-7959
Attorney for Applicants